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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,202

10/27/2003

Marlow C. Jordahl

3856

27034

7590

09/23/2004

NEAL O. WILLMANN  
9521 MONTGOMERY ROAD  
CINCINNATI, OH 45242

EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/694,202	<b>Applicant(s)</b> JORDAHL, MARLOW C.	
	<b>Examiner</b> Gail Verbitsky	<b>Art Unit</b> 2859	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-9 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9, drawn to method for detection of an altered state, classified in class 374, subclass 57.
  - II. Claims 10-14, drawn to device for detection of an altered state, classified in class 374, subclass 5.

The inventions are distinct, each from the other because of the following reasons:

2. This application contains claims directed to the following patentably distinct species of the claimed invention:
3. Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the device of Invention II does not require a method of Invention I because the method requires a signal to advise to indicate that the change in temperature exceeds a predetermined threshold while the device requires a signal indicating a temperature increase (does not necessarily requires to compare temperature to a predetermined temperature). Invention II requires a heating means to establish and maintain the internal temperature, not required by Invention I. Invention II requires a tube housing not required by Invention I.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

- A) species directed to a physical change as the altered state (claim 2),
- B) species directed to a chemical change as the altered state (claim 3)
- C) species directed to an accumulation of scale as the altered state (claim 4)
- D) species directed to a reduction in quantity (claim 5)
- E) species directed to discoloration (claim 6 )

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

- A) species directed to a dishwasher (claim 7)),
- B) species directed to a water heater (claim 8),
- C) species directed to a boiler (claim 9),

3. During a telephone conversation with Mr. Willman, on September 02, 2004 a provisional election was made with traverse to prosecute the invention of Group II, claims 10-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchinson (U.S. 6393312) in view of Moscal (U.S. 5615953).

Hutchinson discloses a boiler (steam generator/ water heater) 10 having a heater 15 inside and a heating medium (water/ steam). The boiler has a temperature sensor and a flow sensor to control the heater temperature. Hutchinson states that the heater surface is susceptible to build-up of calcium (accumulation) on its surface.

Although Hutchinson states that the walls of the boiler are susceptible to build-up accumulation, Hutchinson does not explicitly teach to detect the build-up accumulation (altered state).

Moscal teaches that temperature profile of bank tubes of a boiler is indicative of deposit accumulation on the tube.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Hutchinson, so as to measure temperature profile of the tubes, as taught by Moscal, so as to determine if there is a temperature related accumulation (build-up/ deposit) of calcium on the tubes, so as to minimize the accumulation, in order to protect the device from damage.

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6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchinson and Moscal as applied to claims 10, 12-14 above, and further in view of Witt et al. (U.S. 6428627) [hereinafter Witt].

Hutchinson and Moscal disclose the device as stated above in paragraph 5.

They do not teach that the device can be a dishwasher, as stated in claim 11.

Witt states that a heater tube to a dishwasher is susceptible to mineral build-up causing failure of a heating element.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Hutchinson and Moscal, so as to measure temperature profile of the tube of the heater being a part of the dishwasher, as taught by Witt, so as to determine if there is a temperature related accumulation (build-up/ deposit), because heaters of dishwashers are susceptible to build-up which can cause failure of the heater.

#### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky  
Primary Patent Examiner, TC 2800



September 08, 2004